



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2012-1148; Directorate Identifier 2012-CE-039-AD; Amendment 39-17405; AD 2013-07-01]

RIN 2120-AA64

Airworthiness Directives; Diamond Aircraft Industries GmbH Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final Rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for Diamond Aircraft Industries GmbH Models DA 42, DA 42 M-NG, and DA 42NG airplanes. This AD results from mandatory continuing airworthiness information (MCAI) issued by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as overextension of the main landing gear (MLG) shock absorber that could lead to the MLG jamming in the gear bay and result in damage to the aircraft or occupant injury. We are issuing this AD to require actions to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may examine the AD docket on the Internet at <http://www.regulations.gov> or in person at Document Management Facility, U.S.

Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590.

For service information identified in this AD, contact Diamond Aircraft Industries GmbH, N.A. Otto-Straße 5, A-2700 Wiener Neustadt, Austria, telephone: +43 2622 26700; fax: +43 2622 26780; email: office@diamond-air.at; Internet: <http://www.diamond-air.at>. You may review copies of the referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

FOR FURTHER INFORMATION CONTACT: Mike Kiesov, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4144; fax: (816) 329-4090; email: mike.kiesov@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM was published in the *Federal Register* on October 29, 2012 (77 FR 65503). That NPRM proposed to correct an unsafe condition for the specified products. The MCAI states:

An incident was reported where a Diamond DA 42 experienced main landing gear (MLG) extension problems during approach, with the left hand (LH) MLG not down. An uneventful landing was made with minor damage to the aeroplane and no injuries to occupants.

Subsequent investigation results showed that the affected MLG leg shock absorber, P/N D60-3277-10-00, had overextended, resulting in the MLG being jammed in the gear bay. The overextension had been caused by a retaining nut in the MLG shock absorber which had loosened itself during operation.

This condition, if not corrected, could inhibit proper extension of the MLG, possibly resulting in damage to the aeroplane and injury to occupants.

Prompted by the reported event, Diamond Aircraft Industries (DAI) published Recommended Service Bulletin (RSB) 42-089 / RSB 42NG-017 which includes Working Instruction (WI) WI-RSB-089 / WI-RSB 42NG-017 (published as a single document) to recommend operators to modify the affected dampers to P/N D60-3277-10-00_01 standard, which incorporates installation of a new retaining nut and a new seal system for the MLG damper that is more durable and can withstand a greater temperature range.

Since that RSB was issued, further analysis has shown that the risk of a MLG failing to extend is greater than was initially determined. Consequently, DAI issued Mandatory Service Bulletin MSB 42-095 / MSB 42NG-026 to alert aeroplane owners and operators accordingly. The new MSB contains the same instructions as the earlier RSB, but is no longer 'at owner's discretion'.

For the reasons described above, this AD requires modification of the affected MLG leg shock absorber, P/N D60-3277-10-00. This AD also prohibits installation of unmodified P/N D60-3277-10-00 MLG leg shock absorbers.

Comments

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM (77 FR 65503, October 29, 2012) or on the determination of the cost to the public.

Conclusion

We reviewed the relevant data and determined that air safety and the public interest require adopting the AD as proposed with minor editorial changes. Diamond Aircraft Industries GmbH provided new service information that added marking instructions to annotate the part change and modification. The work-hours to mark two parts using indelible ink followed with clear coating would be very minimal and not impact the estimated cost of compliance. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (77 FR 65503, October 29, 2012) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (77 FR 65503, October 29, 2012).

Costs of Compliance

We estimate that this AD will affect 175 products of U.S. registry. We also estimate that it would take about 2 work-hours per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour. Required parts would cost about \$115 per product.

Based on these figures, we estimate the cost of the AD on U.S. operators to be \$49,875, or \$285 per product.

According to the manufacturer, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all costs in our cost estimate.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on

the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains the NPRM (77 FR 65503, October 29, 2012), the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new AD:

2013-07-01 **Diamond Aircraft Industries GmbH:** Amendment 39-17405; Docket No. FAA-2012-1148; Directorate Identifier 2012-CE-039-AD.

(a) Effective Date

This airworthiness directive (AD) becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Diamond Aircraft Industries GmbH Models DA 42, DA 42 M-NG, and DA 42 NG airplanes, all serial numbers, certificated in any category.

(d) Subject

Air Transport Association of America (ATA) Code 32: Landing Gear.

(e) Reason

This AD was prompted by mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as overextension of the MLG shock absorber. We are issuing this AD to prevent the MLG jamming in the gear bay, which could result in damage to the aircraft or occupant injury.

(f) Actions and Compliance

Unless already done, do the following actions:

(1) Within the next 200 hours time-in-service (TIS) after [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD) or within the next 12 months after [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), whichever occurs first, do either (i) or (ii) as follows:

(i) Modify the left hand (LH) and right hand (RH) MLG leg shock absorbers P/N D60-3277-10-00 following either:

(A) The Instructions section of Diamond Aircraft Industries GmbH Work Instruction WI-MSB 42-095, MSB 42NG-026, Revision 1, dated February 5, 2013, and the Accomplishment/Instructions of Diamond Aircraft Industries GmbH Mandatory Service Bulletin MSB 42-095, MSB 42NG-026, dated November 11, 2011; or

(B) The Instructions section of Diamond Aircraft Industries GmbH Work Instruction WI-RSB 42-089, WI-RSB 42NG-017, Revision 2, dated February 12, 2013, and the Accomplishment/Instructions of Diamond Aircraft Industries GmbH Recommended Service Bulletin RSB 42 089/1, RSB 42NG-017/1, dated April 19, 2011.

(ii) Replace each MLG leg shock absorber P/N D60-3277-10-00 with a modified unit P/N D60-3277-10-00_01, following, as applicable: the Instructions section of Diamond Aircraft Industries GmbH Work Instruction WI-RSB 42-089, WI-RSB 42NG-017, Revision 2, dated February 12, 2013, and Diamond Aircraft Industries GmbH Recommended Service Bulletin RSB 42 089/1, RSB 42NG-017/1, dated April 19, 2011.

(2) After [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), do not install an MLG leg shock absorber P/N D60-3277-10-00 on the airplane, unless the shock absorber has been modified following the instructions in either paragraph (f)(1)(i)(A) or (f)(1)(i)(B) of this AD.

(g) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) **Alternative Methods of Compliance (AMOCs):** The Manager, Standards Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Mike Kiesov, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4144; fax: (816) 329-4090; email:

mike.kiesov@faa.gov. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

(2) **Airworthy Product:** For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

(3) **Reporting Requirements:** For any reporting requirement in this AD, a federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 5 minutes per response, including the time for reviewing instructions, completing and reviewing the collection of information. All responses to this collection of information are mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at: 800 Independence Ave. SW, Washington, DC 20591, Attn: Information Collection Clearance Officer, AES-200.

(h) Related Information

Refer to MCAI European Aviation Safety Agency (EASA) AD No.: 2012-0174, dated September 4, 2012, for related information.

(i) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Diamond Aircraft Industries GmbH Mandatory Service Bulletin MSB 42-095, MSB 42NG-026, dated November 11, 2011;

(ii) Diamond Aircraft Industries GmbH Recommended Service Bulletin RSB 42-089/1, RSB 42NG-017/1, dated April 19, 2011;

(iii) Diamond Aircraft Industries GmbH Work Instruction WI-MSB 42-095, MSB 42NG-026, Revision 1, dated February 5, 2013; and

(iv) Diamond Aircraft Industries GmbH Work Instruction WI-RSB 42-089, WI-RSB 42NG-017, Revision 2, dated February 12, 2013.

(3) For Diamond Aircraft Industries GmbH service information identified in this AD, contact Diamond Aircraft Industries GmbH, N.A. Otto-Straße 5, A-2700 Wiener Neustadt, Austria, telephone: +43 2622 26700; fax: +43 2622 26780; email: office@diamond-air.at; Internet: <http://www.diamond-air.at>.

(4) You may view this service information at FAA, FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Kansas City, Missouri, on March 22, 2013.

Earl Lawrence,
Manager, Small Airplane Directorate,
Aircraft Certification Service.

[FR Doc. 2013-07500 Filed 04/12/2013 at 8:45 am; Publication Date: 04/15/2013]